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EXAMINER	
STAICOVICI, STEFAN	

ART UNIT	PAPER NUMBER
1732	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/533,741	THOMAS M. D'ANGELO	
	Examiner	Art Unit	
	Stefan Staicovici	1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 November 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-6,11,12,14,15 and 17-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-6,11,12,14,15 and 17-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed November 13, 2003 has been entered. Claim 1 has been amended. Claims 1, 3-6, 11-12, 14-15 and 17-22 are pending in the instant application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 4-5, 14, 17-18 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maroschak (US Patent No. 3,859,025) in view of Lupke (US Patent No. 5,429,398).

Maroschak ('025) teaches the basic claimed process for continuously molding corrugated parts including, providing an extruded soft tube of thermoplastic material and a plurality of die blocks (31a, 31b) defining mold halves (32, 33), advancing said soft extruded tube zone in a blow-molding machine (30) where said plurality of die blocks (31a, 31b) continuously form an intermediate corrugated portion (body) (intermediate convoluted segments) between non-corrugated portions (collar) (planar end segments), advances the thus shaped tube using a speed controller (40) (synchronizing the cutter action to the movement of the shaped column) (col. 4, lines 46-53) to a cutting station (60) to separate the molded parts having non-corrugated portions

(collar) (planar end segments) adjacent an intermediate corrugated portion (body) (intermediate convoluted segments) (see col. 2, line 66 through col. 4, line 10 and Figure 2).

Regarding claim 1, Maroschak ('025) does not teach forming end segments having different geometries. Lupke ('398) teaches a process for continuously forming a ribbed tube (convoluted) including a ribbed portion (10) and end segments (112, 114) having a differing geometry by using a plurality of die blocks of differing geometries (52, 52a, 52b) (see Figure 9) in a continuous blow molding machine (50) (col. 5, lines 44-50). Therefore, it would have been obvious for one of ordinary skill in the art to have provided die blocks having differing geometries as taught by Lupke ('398) to form end segments of a differing geometry in the process of Maroschak ('025), because Lupke ('398) specifically teaches that such end segments reduce the complexity of the joining process of the resulting tubes, hence improving product quality and also because both references teach similar processes and end-products. Further regarding claim 1, although Maroschak ('025) in view of Lupke ('398) teach a process for continuously molding corrugated pipes (tubes), Maroschak ('025) in view of Lupke ('398) do not teach that said corrugated pipes (tubes) are for vehicle or industrial equipment. However, as mentioned throughout prosecution of the instant application, recitation of the intended use of the claimed process must result in a structural difference between the claimed process and the prior art in order to patentably distinguish the claimed invention from the prior art. It should be noted that in a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. Therefore, the limitation that the resulting molded corrugated pipes (tubes) are used for a vehicle or industrial equipment or for any other use do not

carry patentable weight unless the intended use results in a manipulative difference as compared to the prior art.

In regard to claim 4, Maroschak ('025) teaches the existence of vertical wall (83) which is removed during the cutting phase (a surface thereon between end segment surfaces thereon) in which a speed controller (40) is adapted to synchronize the movement of the resulting molded product with the delivery rate as it emerges from the molding zone (col. 4, lines 45-50 and col. 6, lines 55-65).

Specifically regarding claims 5 and 14, Lupke ('398) teaches that the geometry of die blocks (52) (52a) and (52b) forms the differing geometry (10), (112) and (114), hence forming an A-B-C pattern. Therefore, it would have been obvious for one of ordinary skill in the art to have provided die blocks having differing geometries as taught by Lupke ('398) to form a molded product having an A-B-C pattern in the process of Maroschak ('025), because Lupke ('398) specifically teaches that such end segments reduce the complexity of the joining process of the resulting tubes, hence improving product quality.

Regarding claims 17-18 and 21-22, Maroschak ('025) teaches the use of a moldable thermoplastic material (col. 3, line 1). It is submitted that a moldable material is a flexible material. Further, it is submitted that a thermoplastic material includes a thermoplastic polyolefin and a thermoplastic elastomer.

4. Claims 3, 6, 11-12, 15 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maroschak (US Patent No. 3,859,025) in view of Lupke (US Patent No. 5,429,398) and in further view of Rosenbaum (US Patent No. 4,509, 911).

Maroschak ('025) in view of Lupke ('398) teaches the basic claimed process as described above.

Regarding claim 3, Maroschak ('025) in view of Lupke ('398) does not each that the end segments differ from part to part. Rosenbaum ('911) teaches a process for continuously forming a tube including, providing an extruded soft tube of plastic material and a plurality of die blocks (82, 84), advancing said soft extruded tube zone in a blow-molding machine (80) where said plurality of die blocks (82, 84) continuously form a tube having different geometries from part to part (A, B, C, D) (see col. 3, lines 1-2) and, cutting said formed tube. Further, it should be noted that Rosenbaum ('911) teaches that its teachings can be incorporated in a process that forms a coupling structure as an integral part of the tubing (col. 1, lines 15-20). Therefore, it would have been obvious for one of ordinary skill in the art to have formed end segments that differ from part to part as taught by Rosenbaum ('911) in the process of Maroschak ('025) in view of Lupke ('398) because, Rosenbaum ('911) specifically teaches that it can be incorporated in a process that forms a coupling structure as an integral part of the tubing as the process of Maroschak ('025) in view of Lupke ('398) and also because, process versatility improves by reducing the complexity of the joining process of the resulting tubes to a large geometrical variety of tubes. Further, it should be noted that all references teach similar materials and processes.

In regard to claims 6, 11-12 and 15, Maroschak ('025) teaches continuously molding an extruded plastic tube using a plurality of die blocks to result in an $(A\text{-}B)_n$ pattern. Lupke ('398) teaches continuously molding an extruded plastic tube using a plurality of die blocks to result in an $(A\text{-}B\text{-}C)_n$ pattern. Rosenbaum ('911) teaches continuously molding an extruded plastic tube using a plurality of die blocks to result in an $(A\text{-}B\text{-}C\text{-}D)_n$ pattern, in which A, B, C and D have

different geometries (see col. 3, lines 1-2). Therefore, it is submitted that the art of record as a whole teaches a wide variety of differing geometries that can be continuously molded from an extruded plastic tube using a plurality of die blocks and as such it is submitted that Rosenbaum ('911) teaches molding an extruded plastic tube using a plurality of die blocks to result in an $(A\text{-}B\text{-}C)_n$ and an $(A\text{-}B\text{-}C\text{-}C'\text{-}B\text{-}A)_n$ pattern. Therefore, it would have been obvious for one of ordinary skill in the art to have molded an extruded plastic tube using a plurality of die blocks to result in an $(A\text{-}B\text{-}C)_n$ or an $(A\text{-}B\text{-}C\text{-}C'\text{-}B\text{-}A)_n$ pattern as taught by Rosenbaum ('911) in the process of Maroschak ('025) in view of Lupke ('398) because, Rosenbaum ('911) specifically teaches that it can be incorporated in a process that forms a coupling structure as an integral part of the tubing as the process of Maroschak ('025) in view of Lupke ('398) and also because, process versatility improves by reducing the complexity of the joining process of the resulting tubes to a large geometrical variety of tubes. Further, it should be noted that all references teach similar materials and processes.

Regarding claims 19 and 20, Maroschak ('025) teaches the use of a moldable thermoplastic material (col. 3, line 1). It is submitted that a moldable material is a flexible material. Further, it is submitted that a thermoplastic material includes a thermoplastic polyolefin and a thermoplastic elastomer.

5. Claims 1, 4-5, 14, 17-18 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maroschak (US Patent No. 3,859,025) in view of Lupke (US Patent No. 5,429,398) and in further view of Kato (US Patent No. 6,051,789).

Maroschak ('025) teaches the basic claimed process for continuously molding corrugated parts including, providing an extruded soft tube of thermoplastic material and a plurality of die

blocks (31a, 31b) defining mold halves (32, 33), advancing said soft extruded tube zone in a blow-molding machine (30) where said plurality of die blocks (31a, 31b) continuously form an intermediate corrugated portion (body) (intermediate convoluted segments) between non-corrugated portions (collar) (planar end segments), advances the thus shaped tube using a speed controller (40) (synchronizing the cutter action to the movement of the shaped column) (col. 4, lines 46-53) to a cutting station (60) to separate the molded parts having non-corrugated portions (collar) (planar end segments) adjacent an intermediate corrugated portion (body) (intermediate convoluted segments) (see col. 2, line 66 through col. 4, line 10 and Figure 2).

Regarding claim 1, Maroschak ('025) does not teach forming end segments having different geometries. Lupke ('398) teaches a process for continuously forming a ribbed tube (convoluted) including a ribbed portion (10) and end segments (112, 114) having a differing geometry by using a plurality of die blocks of differing geometries (52, 52a, 52b) (see Figure 9) in a continuous blow molding machine (50) (col. 5, lines 44-50). Therefore, it would have been obvious for one of ordinary skill in the art to have provided die blocks having differing geometries as taught by Lupke ('398) to form end segments of a differing geometry in the process of Maroschak ('025), because Lupke ('398) specifically teaches that such end segments reduce the complexity of the joining process of the resulting tubes, hence improving product quality and also because both references teach similar processes and end-products.

Further regarding claim 1, although Maroschak ('025) in view of Lupke ('398) teach a process for continuously molding corrugated pipes (tubes), Maroschak ('025) in view of Lupke ('398) do not teach a molded part (corrugated tube) for vehicle or industrial equipment. However, the use of corrugated pipes (tubes) in vehicles is well known as evidenced by Kato

('789). Specifically, Kato ('789) teaches the use of a corrugated plastic tube in a vehicle (see Abstract and, Figures 1 and 7). Therefore, it would have been obvious for one of ordinary skill in the art to have formed a molded part (corrugated tube) for a vehicle as taught by Kato ('789) using the process of Maroschak ('025) in view of Lupke ('398) because, Kato ('789) specifically teaches that it is well known to use corrugated plastic tubes in a vehicle, whereas Maroschak ('025) in view of Lupke ('398) teach a process for continuously molding corrugated pipes (tubes) and also because all references teach similar materials and processes resulting in a similar structure. Further, it should be noted that recitation of the intended use of the claimed process must result in a structural difference between the claimed process and the prior art in order to patentably distinguish the claimed invention from the prior art. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art.

In regard to claim 4, Maroschak ('025) teaches the existence of vertical wall (83) which is removed during the cutting phase (a surface thereon between end segment surfaces thereon) in which a speed controller (40) is adapted to synchronize the movement of the resulting molded product with the delivery rate as it emerges from the molding zone (col. 4, lines 45-50 and col. 6, lines 55-65).

Specifically regarding claims 5 and 14, Lupke ('398) teaches that the geometry of die blocks (52) (52a) and (52b) forms the differing geometry (10), (112) and (114), hence forming an A-B-C pattern. Therefore, it would have been obvious for one of ordinary skill in the art to have provided die blocks having differing geometries as taught by Lupke ('398) to form a molded product having an A-B-C pattern in the process of Maroschak ('025), because Lupke

('398) specifically teaches that such end segments reduce the complexity of the joining process of the resulting tubes, hence improving product quality.

Regarding claims 17-18 and 21-22, Maroschak ('025) teaches the use of a moldable thermoplastic material (col. 3, line 1). It is submitted that a moldable material is a flexible material. Further, it is submitted that a thermoplastic material includes a thermoplastic polyolefin and a thermoplastic elastomer.

6. Claims 3, 6, 11-12, 15 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maroschak (US Patent No. 3,859,025) in view of Lupke (US Patent No. 5,429,398) and in further view of Kato (US Patent No. 6,051,789) and Rosenbaum (US Patent No. 4,509, 911).

Maroschak ('025) in view of Lupke ('398) and in further view of Kato ('789) teach the basic claimed process as described above.

Regarding claim 3, Maroschak ('025) in view of Lupke ('398) and in further view of Kato ('789) do not each that the end segments differ from part to part. Rosenbaum ('911) teaches a process for continuously forming a tube including, providing an extruded soft tube of plastic material and a plurality of die blocks (82, 84), advancing said soft extruded tube zone in a blow-molding machine (80) where said plurality of die blocks (82, 84) continuously form a tube having different geometries from part to part (A, B, C, D) (see col. 3, lines 1-2) and, cutting said formed tube. Further, it should be noted that Rosenbaum ('911) teaches that its teachings can be incorporated in a process that forms a coupling structure as an integral part of the tubing (col. 1, lines 15-20). Therefore, it would have been obvious for one of ordinary skill in the art to have formed end segments that differ from part to part as taught by Rosenbaum ('911) in the process

of Maroschak ('025) in view of Lupke ('398) and in further view of Kato ('789) because, Rosenbaum ('911) specifically teaches that it can be incorporated in a process that forms a coupling structure as an integral part of the tubing as the process of Maroschak ('025) in view of Lupke ('398) and in further view of Kato ('789) and also because, process versatility improves by reducing the complexity of the joining process of the resulting tubes to a large geometrical variety of tubes. Further, it should be noted that all references teach similar materials and processes.

In regard to claims 6, 11-12 and 15, Maroschak ('025) teaches continuously molding an extruded plastic tube using a plurality of die blocks to result in an $(A\text{-}B)_n$ pattern. Lupke ('398) teaches continuously molding an extruded plastic tube using a plurality of die blocks to result in an $(A\text{-}B\text{-}C)_n$ pattern. Rosenbaum ('911) teaches continuously molding an extruded plastic tube using a plurality of die blocks to result in an $(A\text{-}B\text{-}C\text{-}D)_n$ pattern, in which A, B, C and D have different geometries (see col. 3, lines 1-2). Therefore, it is submitted that the art of record as a whole teaches a wide variety of differing geometries that can be continuously molded from an extruded plastic tube using a plurality of die blocks and as such it is submitted that Rosenbaum ('911) teaches molding an extruded plastic tube using a plurality of die blocks to result in an $(A\text{-}B\text{-}C)_n$ and an $(A\text{-}B\text{-}C\text{-}C'\text{-}B\text{-}A)_n$ pattern. Therefore, it would have been obvious for one of ordinary skill in the art to have molded an extruded plastic tube using a plurality of die blocks to result in an $(A\text{-}B\text{-}C)_n$ or an $(A\text{-}B\text{-}C\text{-}C'\text{-}B\text{-}A)_n$ pattern as taught by Rosenbaum ('911) in the process of Maroschak ('025) in view of Lupke ('398) and in further view of Kato ('789) because, Rosenbaum ('911) specifically teaches that it can be incorporated in a process that forms a coupling structure as an integral part of the tubing as the process of Maroschak ('025) in view of

Lupke ('398) and in further view of Kato ('789) and also because, process versatility improves by reducing the complexity of the joining process of the resulting tubes to a large geometrical variety of tubes. Further, it should be noted that all references teach similar materials and processes.

Regarding claims 19 and 20, Maroschak ('025) teaches the use of a moldable thermoplastic material (col. 3, line 1). It is submitted that a moldable material is a flexible material. Further, it is submitted that a thermoplastic material includes a thermoplastic polyolefin and a thermoplastic elastomer. Further, Kato ('789) teaches the use of a thermoplastic polyolefin to form a corrugated tube (column 3, lines 14-16).

Response to Arguments

7. Applicant's arguments filed November 13, 2003 have been considered.

In response to applicant's argument that the applied prior art is nonanalogous art (page 7 of the amendment filed November 13, 2003), it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Applicant's claimed invention is drawn to a continuous process for making a tube for a vehicle having "planar end segments of differing geometry" (see page 6 of the amendment filed November 13, 2003). Maroschak ('025) teaches the basic claimed process for continuously molding corrugated tubular parts including, providing an extruded soft tube of thermoplastic material and a plurality of die blocks that continuously form an intermediate

corrugated portion (body) (intermediate convoluted segments) between non-corrugated portions (collar) (planar end segments) and, cutting said formed tube into separate molded parts having non-corrugated portions (collar) (planar end segments) adjacent an intermediate corrugated portion (body) (intermediate convoluted segments). Maroschak ('025) does not teach forming said end segments with different geometries. Lupke ('398) teaches a process for continuously forming a ribbed tube (convoluted) including a ribbed portion (10) and end segments (112, 114) having a differing geometry by using a plurality of die blocks of differing geometries (52, 52a, 52b) (see Figure 9). Therefore, it would have been obvious for one of ordinary skill in the art to have provided die blocks having differing geometries as taught by Lupke ('398) to form end segments of a differing geometry in the process of Maroschak ('025), because Lupke ('398) specifically teaches that such end segments reduce the complexity of the joining process of the resulting tubes, hence improving product quality and also because both references teach similar processes and end-products. It is submitted that the teachings of Maroschak ('025) in view of Lupke ('398) are "reasonably pertinent to the particular problem with which the applicant was concerned," specifically, a continuous process for making a tube for a vehicle having "planar end segments of differing geometry" (see page 6 of the amendment filed November 13, 2003). Further, it is noted that as shown throughout prosecution of the instant application, recitation of the intended use of the claimed process must result in a structural difference between the claimed process and the prior art in order to patentably distinguish the claimed invention from the prior art. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. Therefore, the limitation that the resulting molded corrugated pipes (tubes) are used for a vehicle or industrial equipment or for any other use do not

carry patentable weight unless the intended use results in a manipulative difference as compared to the prior art. However, in order to advance prosecution of the instant application, the teachings of Kato ('789) were used to show that the use of a corrugated plastic tube in a vehicle is well known (see Abstract and, Figures 1 and 7) (see pages 10-11 of the amendment filed November 13, 2003).

Applicant argues that the "processing techniques of Maroshack and the processing techniques of Lupke are specifically unique unto themselves and are not properable combinable" because "Applicant...is not interested in joining one tube with the other as has been described in the Lupke specification but rather is interested in utilizing continuous extrusion high production techniques to produce a vehicle or *industrial tube* or boot" (emphasis added) (see page 9 of the amendment filed November 13, 2003). In response, it is noted that under MPEP §2145(III) the "test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference.... Rather, the test is what the combined teachings of those references would have suggested to those of ordinary skill in the art." In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). See also In re Sneed, 710 F.2d 1544, 1550, 218 USPQ 385, 389 (Fed. Cir. 1983). Further, it is noted that under MPEP §2144, it " is *not necessary* that the prior art suggest the combination to achieve the *same advantage* or result discovered by applicant. In re Linter, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972)." Furthermore, MPEP §2144 states that it "is clear that while there must be motivation to make the claimed invention, there is no requirement that the prior art provide the same reason as the applicant to make the claimed invention." It is noted that the process of Maroschak ('025) in view of Lupke ('398) does teach an *industrial tube* (emphasis added).

In response to applicant's argument that there is no suggestion to combine the teachings of Maroschak ('025), Lupke ('398) and Rosenbaum ('911) (see pages 9-10 of the amendment filed November 13, 2003), the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Maroschak ('025) teaches a process for continuously molding corrugated tubular parts including, providing an extruded soft tube of thermoplastic material and a plurality of die blocks that continuously form an intermediate corrugated portion (body) (intermediate convoluted segments) between non-corrugated portions (collar) (planar end segments) and, cutting said formed tube into separate molded parts having non-corrugated portions (collar) (planar end segments) adjacent an intermediate corrugated portion (body) (intermediate convoluted segments). Lupke ('398) teaches a process for continuously forming a ribbed tube (convoluted) including a ribbed portion (10) and end segments (112, 114) having a differing geometry by using a plurality of die blocks of differing geometries (52, 52a, 52b) (see Figure 9). Rosenbaum ('911) teaches a continuous process for making a tube including, providing an extruded soft tube of plastic material and a plurality of die blocks, advancing said soft extruded tube zone in a blow-molding machine where said plurality of die blocks continuously form a tube having different geometries from part to part (A, B, C, D) (see col. 3, lines 1-2) and, cutting said formed tube. Further, it should be noted that Rosenbaum ('911) teaches that its teachings can be incorporated in a process that forms a *coupling structure*

(emphasis added) as an integral part of the tubing (col. 1, lines 15-20), which would be a tube formed by the process of Maroschak ('025) in view of Lupke ('398). Therefore, it would have been obvious for one of ordinary skill in the art to have formed end segments that differ from part to part as taught by Rosenbaum ('911) in the process of Maroschak ('025) in view of Lupke ('398) because, Rosenbaum ('911) specifically teaches that it can be incorporated in a process that forms a coupling structure as an integral part of the tubing as the process of Maroschak ('025) in view of Lupke ('398) and also because, process versatility improves by reducing the complexity of the joining process of the resulting tubes to a large geometrical variety of tubes.

Applicant argues that the process of Rosenbaum ('911) is a "blow molding process," whereas the "Applicant's invention on the other hand is directed towards a high throughput continuous process such as an extrusion process which can produce the vehicle or industrial boots or tubes so that they may compete effectively with blow molded parts" (see page 10 of the amendment filed November 13, 2003). In response, it is noted that Maroschak ('025), Lupke ('398) and Rosenbaum ('911) teach a continuous process including both extrusion and blow molding. Further, the original disclosure on page 4, lines 1-5, describes a corrugating machine including a blow molding machine. Furthermore, Figure 1 of Maroschak ('025) and Figure 5 of Rosenbaum ('911) are similar to Figure 1 of the original disclosure in that all figures show a continuous molding process including an extruder and a corrugating machine including a blow molding machine.

8. The declaration under 37 CFR 1.132 filed October 17, 2003 is insufficient to overcome the rejection of claims 1, 3-6, 11-12, 14-15 and 17-22, as set forth above because, the facts presented are not commensurate in scope with the claims presented. Specifically, the declaration

under 37 CFR 1.132 filed October 17, 2003 argues the commercial success of "dust boot covers," whereas the claimed invention is drawn to a much broader "flexible tube for a vehicle or industrial equipment."

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Staicovici, Ph.D. whose telephone number is (571) 272-1208. The examiner can normally be reached on Monday-Friday 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael P. Colaianni, can be reached at (571) 272-1196.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1300.

Stefan Staicovici, PhD

Primary Examiner 1/24/04

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January 24, 2004